

**Notice of Allowability**

Application No.

09/495,886

Examiner

Lamson D. Nguyen

Applicant(s)

ALFARO ET AL.

Art Unit

2861

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE dated 07/21/03.
2. ☒ The allowed claim(s) is/are 1-8,10 and 12-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance:

- The primary reasons for allowance for claims 1-8, 10, 12-13, and 16 are the inclusion of a printing method/technique comprising the step of eliminating certain selected alternate pixel rows entirely from the printed rows of higher resolution bitmap by converting the higher resolution bitmap into a downscaled lower resolution bitmap having a reduced number of preserved rows available for printing, said preserved rows including "on" pixels added from the eliminated non-printing rows to help avoid losing image details, and printing the downscaled lower resolution bitmap onto an asymmetrical pixel grid having the first resolution in one axis and the higher resolution in a second axis. It is these limitations, either alone or combined as claimed, that have not been taught, found, or suggested by prior art.
- The primary reasons for allowance for claims 15, 17-18 are the inclusion of the limitation of a method of achieving high quality printing comprising the steps of transforming a first bitmap by eliminating certain pixel rows from a first symmetrical bitmap in order to create a downscaled asymmetrical bitmap having a reduced number of preserved rows available for printing on an asymmetrical pixel grid having a higher resolution in a carriage scan axis and a lower resolution in a media

advance axis, said preserved rows including "on" pixels added from the eliminated non-printing rows to help avoid losing image details. It is these limitations, either alone or combined as claimed, that have not been taught, found, or suggested by prior art.

- The primary reasons for allowance for claims 19-20 are the inclusion of a printing system comprising a writing system for downscaling raster data from a high resolution  $A=B$  bitmap to a lower resolution asymmetrical bitmap where  $A \neq B$  by completely eliminating certain linear sequences of printed pixel rows such as selected non-adjacent pixel rows resulting in a modified bitmap with a reduced number of remaining preserved pixel rows to be printed, wherein said writing system also performs a logical operation comparing "on" pixels in the eliminated non-printing rows with "off" pixels in selected adjacent remaining preserved rows in order to preserve and transfer certain "on" pixels from an eliminated non-printing row to a remaining preserved row for printing. It is these limitations, either alone or combined as claimed, that have not been taught, found, or suggested by prior art.

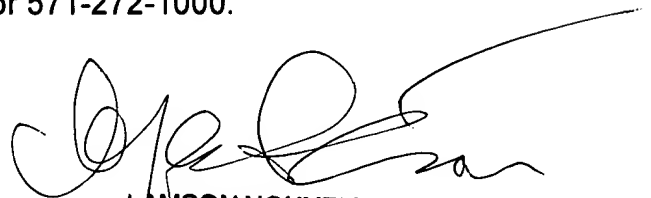
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamson D. Nguyen whose telephone number is 571-272-2259. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on 571-272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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LAMSON NGUYEN  
PRIMARY EXAMINER  
08/28/06